

Microsoft

Exchange

Server-2013

Course Presentation



Microsoft Exchange Server-2013

Mapped Course

Course Presentation



© 2015 Zoom Technologies India Pvt. Ltd.

All rights reserved. No part of this book or related material may be reproduced in any form or by any means without prior permission from Zoom Technologies India Pvt. Ltd. All precautions have been taken to make this book and related material error-free. However, Zoom Technologies India Pvt. Ltd. is not liable for any errors or omissions. The contents of this book are subject to change without notice.

DISCLAIMER: Microsoft, Windows, Exchange Server, Outlook are registered trademarks of Microsoft Inc.





MICROSOFT EXCHANGE SERVER 2013

ZOOM
TECHNOLOGIES



INTRODUCTION

ZOOM
TECHNOLOGIES

What is Exchange Server?



- It is an Application from Microsoft to provide Email communication.
- It is used not only for emails, but also used for document sharing, voice and mobile communications.
- It works as a Client/Server Model.



Versions of Exchange Server



- Exchange 4.0 Exchange 5.0 Exchange 5.5
 - Windows NT Domain
- Exchange 2000
 - Windows Server 2000 Family
- Exchange 2003
 - Windows Server 2000 Family
 - Windows Server 2003 Family
- Exchange 2007
 - Windows Server 2003 Family
 - Windows Server 2008 Family
- Exchange 2010
 - Windows Server 2008 Family
 - Windows Server 2008 R2 Family
- Exchange 2013
 - Windows Server 2008 R2 Family
 - Windows Server 2012 Family



Flavors of Exchange Server 2013



- **Standard Edition**
 - Meant for small size organization.
 - Supports 5 Databases
 - Storage limit 50 GB
- **Enterprise Edition**
 - Meant for medium and large size organization.
 - Supports 50 Databases
 - No Storage limit



Hardware Requirements



Component	Requirement
Processor	Minimum: 1.6 GHz (64 bits) or Faster
Memory	Minimum: 8 GB RAM Recommended: 8 GB RAM plus 10 MB of RAM per Mailbox
Available Disk Space	Minimum: 1.2 GB free disk space on the drive where you install Exchange Server 200 MB free disk space on the system drive
Drive	DVD-ROM Drive



Software Requirements



- **Windows Server 2008 R2 Server Family: Standard Edition, Enterprise Edition, Data Center Server with Service Pack 1.**

(OR)

- **Windows Server 2012 Server Family : Standard Edition or Data Center Server.**



Services Required



- **Services required in Network:**
 - **Active Directory Domain Services & DNS.**
- **Services required in Exchange System:**
 - **IIS (Web Server) along with following Sub components.**
 - **ASP.NET**
 - **Basic Authentication**
 - **Windows Authentication**
 - **Digest Authentication**
 - **Dynamic Content Compression**
 - **IIS 6 Management Compatibility**



Services Required



- **Additional Components required in Exchange System:**
 - Microsoft .NET Framework 4.5
 - Microsoft Unified Communications Managed API 4.0
 - Windows Power Shell



Features of Exchange Server 2013



- **Integrated with Active Directory Domains & Services.**
- **Integrated with Internet Information Services.**
- **Exchange Server Roles.**



Server Roles



- The Exchange Server performs the following Roles :
 - Mailbox Server Role
 - Client Access Server Role



Mailbox Server Role



- Server hosts the mailbox of users.
- Delivers the mail to the Recipient Mailbox.
- Provides Unified Messaging services.
- Controls all mail routing and flow.
- Applies transport rules and policies.



Mailbox Server role features enhancements



- Hosting for mailbox databases
- Hosting for public folders
- Transport and message routing services
- Hub Transport service
- Mailbox Transport services
- Unified Messaging service
- High-availability services



Client Access Server Role



- Interface between the user and the mailbox.
- Provides POP3, IMAP and SMTP services.





RECIPIENTS AND CLIENTS

ZOOM
TECHNOLOGIES

Recipients

ZOOM
TECHNOLOGIES

- **Mailbox Enabled User**
 - A User Account in Active Directory with mailbox and email address in Exchange Server.
- **Mail Enabled User or Mail User**
 - A User Account in Active Directory with external e-mail address but without a mailbox in Exchange Server.
- **Distribution Group**
 - A Group with e-mail address, used for distributing e-mails to its members.
- **Mail Contact**
 - A Contact in Active Directory with external email address.

Exchange Admin Center (EAC)

- It's a web-based management console in Microsoft Exchange Server 2013 which is improved for on-premises and hybrid Exchange deployments.
- The EAC replaces the Exchange Management Console (EMC) and the Exchange Control Panel (ECP), which were the two interfaces used to manage Exchange Server 2010.

Protocols Used in Exchange

Protocol	Port No.	Usage
HTTP (Hyper Text Transfer Protocol)	80	Browsing and Accessing web pages
HTTPS (Hyper Text Transfer Protocol Secure)	443	Secure HTTP
SMTP (Simple Mail Transfer Protocol)	25	Used for email delivery
POP3 (Post Office Protocol)	110	Used for Downloading Mails
IMAP (Internet Mail Access Protocol)	143	Used for Receiving Mails

- Outlook Web App
- Microsoft Office Outlook



USER PROPERTIES

Mailbox Permissions of Exchange



- **E-mail Addresses**
 - It is used to add multiple e-mail addresses to the same user or to edit the existing e-mail addresses.
- **Mailbox Usage**
 - It is used to define the mailbox size limits of an user and how long to store the deleted items.



Mailbox Features



- **Forwarding Address**
 - Used to forward the incoming messages of this user to another user.
- **Recipient Limits**
 - Used to specify the number of users a single mail can be delivered by this user.



Mail Flow



- **Message Size Restrictions**
 - Used to define the Sending and Receiving Message size limits.
- **Message Delivery Restrictions**
 - Used to define the users from whom the messages are accepted and from whom the messages can be rejected.

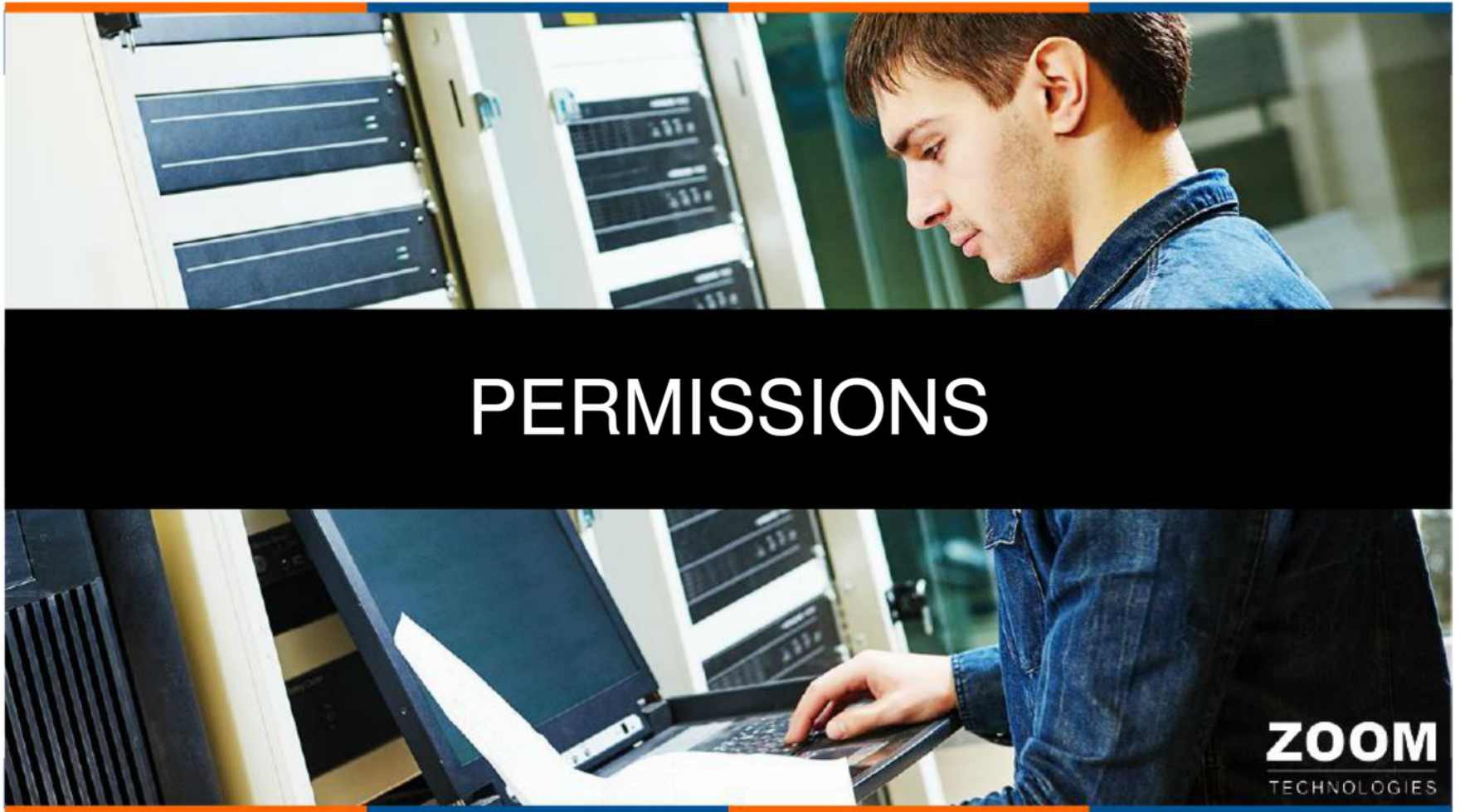


Mailbox Delegation



- **Send As**
 - Used to allow delegates to use the mailbox to send messages.
- **Send on Behalf**
 - Used to grant send on behalf permission of this user to another user.
- **Mailbox Full Access**
 - Used to grant full mailbox access of this user to another user.





Role Based Access Control (RBAC)



- The permissions that you grant to administrators and users are based on management roles.
- A role defines the set of tasks that an administrator or user can perform.

Role Based Access Control (RBAC)



- There are two types of roles, Administrative roles and End-user roles:
- Administrative Roles :
 - These roles contain permissions that can be assigned to administrators or specialist users using role groups that manage a part of the Exchange organization, such as recipients, servers, or databases.
- End-User Roles :
 - These roles, assigned using role assignment policies, enable users to manage aspects of their own mailbox and distribution groups that they own.



Role Groups and Role Assignment Policies



- Exchange 2013 provides you with the following :
- Role Groups :
 - Role groups enable you to grant permissions to administrators and specialist users.
- Role Assignment Policies :
 - Role assignment policies enable you to grant permissions to end users to change settings on their own mailbox or distribution groups that they own.



- It is used to create organization-level policies to manage access to features in Outlook Web App.
- After applying Outlook Web App mailbox policy to a mailbox, it will override the settings of the virtual directory.
- Only one Outlook Web App mailbox policy can be applied to a mailbox.

MONITORING OF RECIPIENTS

- In Microsoft Exchange Server 2013, mail flow occurs through the transport pipeline.
- The transport pipeline is a collection of services, connections, components, and queues that work together to route all messages to the categorizer in the Transport service on a Mailbox server inside the organization.

- The transport pipeline consists of the following services:
 - Front End Transport Service
 - The Front End Transport service only communicates with the Transport service on a Mailbox server and doesn't queue any messages locally.
 - Transport Service
 - The Transport service handles all SMTP mail flow for the organization, performs message categorization, and performs message content inspection.
 - The Transport service routes messages between the Mailbox Transport service and the Front End Transport service.

Rules (Transport Rules)



- Preventing inappropriate content from entering or leaving the organization.
- Filtering confidential organization information.
- Tracking or archiving copying messages that are sent to or received from specific individuals.
- Redirecting inbound and outbound messages for inspection before delivery.
- Applying disclaimers to messages as they pass through the organization.



Delivery Reports



- It is used to track delivery information about messages sent by or received from any specific mailbox in exchange organization.
- It can search for messages sent by the mailbox, or sent to the mailbox, and it can filter the search results by the message subject.



Accepted Domains



- **Accepted Domains:**
 - Accepted domains is an SMTP namespace that the Exchange organization can send and receive email for.
- **Authoritative:**
 - Email is delivered to a recipient in this Exchange organization.
- **Internal Relay:**
 - Email is delivered to a recipient in this Exchange organization or relayed to an email server outside this organization.
- **External Relay:**
 - Email is relayed to an email server outside this Exchange organization.



Email Address Policies



- Email address policies automate the process of assigning email addresses to recipients.
- Email address policies define the format for the e-mail address.



Connectors



- It is used to control inbound and outbound mail flow in Exchange organization.
- It will route mail to and receive mail from recipients outside the organization.
- Send Connectors:
 - It controls the flow of outbound messages to the receiving server.
- Receive Connectors:
 - It controls the flow of inbound messages to the Exchange organization.



Queue Viewer



- A queue is a temporary holding location for messages that are waiting to enter the next stage of processing or delivery to a destination.
- It is used to check the mail stuck in the queue before delivery.





Database



- **Mailbox Database:**
 - It is the location which contains mailboxes and the recipient's information.
 - It stores the information in Exchange Database format (.edb).

Database



- Mailbox Database
 - User Mailbox
 - User Emails
 - Private Mails
 - Public Folder Mailbox
 - Public Folders
 - Public Emails



Database



- In Exchange Server 2013, each Mailbox Database shares a single set of logs.
- Each Exchange Server 2013 Standard system can handle a maximum of 5 databases per Server.
- Total number of databases on a server cannot exceed 5.



Archive Mailbox



- It provides users with an alternate storage location in which to store historical messaging data.
- It is an additional mailbox for a mailbox enabled user.
- Users can move or copy messages between their primary mailbox and the archive mailbox.
- It presents a consistent view of messaging data to users and eliminates the user overhead required to manage .pst files.

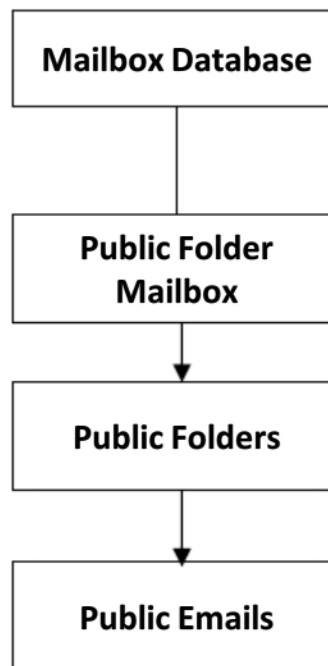


Public Folders



- It provides the centralized storage about any type of data that is meant to be accessed by multiple users in an organization.
- It is designed for shared access and provide an easy and effective way to collect, organize, and share information with other people in organization.
- It can also be used for storage of documents, administrative messages and other applications.





Malware Filter

- Malware Filter protection feature helps combat malware in email messaging environment.
- Malware is comprised of viruses and spyware.
- Viruses infect other programs and data, and they spread throughout the computer looking for programs to infect.
- Spyware refers to malware that gathers user's personal information, such as sign-in information and personal data and sends it back to its author.



Client Side Backup & Recovery



- **Outlook Web App:**
 - It does not support client side backup & recovery of emails.
- **Microsoft Office Outlook:**
 - It supports client side backup & recovery of emails.



- **Database Availability Group (DAG):**
 - A DAG is a group of up to 16 Mailbox Servers that provides the structure for replicating and activating database copies.
 - A DAG is a boundary for mailbox database replications.

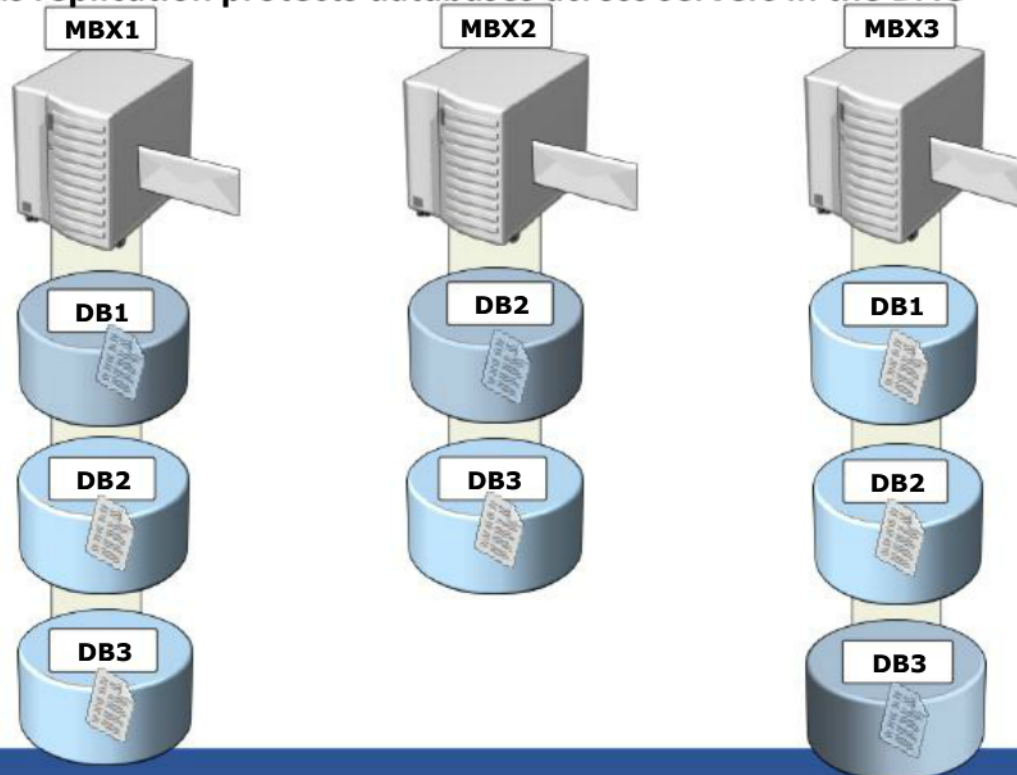
- **Recommendations:**
 - **Witness Server** – It is used to store witness information.
 - **Witness Directory** – It is used on the witness server to store witness information.
 - **DAG IP addresses** – IP addresses used by DAG.
 - **Windows Server 2012 Datacenter, or Windows Server 2008 R2 Datacenter or Enterprise Editions.**

Database Availability Group (DAG)

- **Active Manager:**
 - It is used to control the failover of Databases.
 - It has two roles PAM & SAM.
 - **Primary Active Manager (PAM)**
 - It will decide which database copies will be active and passive.
 - **Standby Active Manager (SAM)**
 - It detects the failures of databases and the local Information Store.

Database Availability Group (DAG)

- Continuous replication protects databases across servers in the DAG



MCSE-2012 Full Course

MICROSOFT CERTIFIED SOLUTIONS EXPERT

Practicals in real-time environment. Detailed curriculum with all 5 papers

Duration: 1 Month | 4 Hrs Per Day (starts on 15th & 30th of every month)

Batches: Morning: 8.30 to 10.30 • Afternoon: 2.00 to 4.00 • Evening: 7.30 to 9.30

CCNA (v 2.0) Full Course

CISCO CERTIFIED NETWORK ASSOCIATE

Cisco Routers with BSNL/TELCO MUX & Live Channelised E1

Duration: 1 Month | 4 Hrs Per Day (starts on 15th & 30th of every month)

Batches: Morning: 8.30 to 10.30 • Afternoon: 2.00 to 4.00 • Evening: 7.30 to 9.30

LINUX ADMINISTRATION

COMPLETE RHCE LINUX

Practicals on Live Web Administration + Integration of Windows with Linux/Unix (Samba Server)

Duration: 2 Weeks | 4 Hrs Per Day (starts on 15th & 30th of every month)

Batches: Morning: 8.00 • Afternoon: 1.30 • Evening: 7.00

PC HARDWARE & NETWORKING

WORKSHOP ON EMERGING TECHNOLOGIES

- Ethical Hacking, Cyber Security and Firewall
- Open Source: A glimpse into advance Linux
- VMware vSphere and MS Private Clouds
- Cisco WAN Technology & Collaboration

Free MCSE & CCNA Exam Practice Questions

EHCE | Ethical Hacking & Countermeasures Expert

Course is mapped to EHCE course from US-Council (www.us-council.com)

(Pre requisite is CCNA / MCSE / LINUX)

Duration: 2 Weeks | 4 Hrs Per Day (starts on 15th & 30th of every month)

Batches: Morning: 7.30 or Evening: 6.00

Fees: ₹ 9,500/-
+ 14% Service Tax

CCNP R&S

CISCO CERTIFIED NETWORK PROFESSIONAL

Duration: 1 Month | 4 Hrs Per Day (starts on 15th of every month)

Batches: Morning: 7.30 • Afternoon: 2.00 • Evening: 6.00

- Labs on latest routers with IOS version 15.X

Monitoring, Diagnostics & Troubleshooting Tools

- PRTG • Wireshark • SolarWinds, etc.

Exam Practice Challenge Labs

CCIE R&S

CISCO CERTIFIED INTERNETWORK EXPERT

Duration: 1 Month | 4 Hrs Per Day (starts on 15th of every month)

Batches: Morning: 7.30 • Evening: 6.00

- Individual Rack For Every Student
- Real time scenarios by 20+ years experienced CCIE certified industry expert who has worked on critical projects worldwide.

Written + Lab Exam Focus

FREE Full Scale 8 Hours Exam Lab Included

Unlimited Lab Access For 1 Year

Complete Package
for Only

Fees: ₹ 5,900/-

+ 14% Service Tax

Duration: 3 Months
4 Hrs Per Day

100%
GUARANTEED
JOB
ASSISTANCE

Fees: ₹ ~~10,000/-~~

Introductory Special Offer

Fees: ₹ 5,500/-

+ 14% Service Tax

Fees: ₹ ~~25,000/-~~

Introductory Special Offer

Fees: ₹ 9,999/-

+ 14% Service Tax

MICROSOFT EXCHANGE SERVER-2013

Duration: 2 Weeks | 4 Hrs Per Day (starts on 15th & 30th of every month)
Batches: (Contact the Counselors for the next available batch)

Fees: ₹ 2,500/-
+ 14% Service Tax

MICROSOFT PRIVATE CLOUD

Microsoft Certified Solutions Expert [MCSE] Private Cloud

Duration: 2 Weeks | 4 Hrs Per Day

Batches: (Contact the Counselors for the next available batch)

Fees: 2,500/-
+ 14% Service Tax

ADVANCED LINUX

Duration: 2 Weeks | 4 Hrs Per Day (starts on 15th & 30th of every month)
Batches: (Contact the Counselors for the next available batch)

Fees: ₹ 2,500/-
+ 14% Service Tax

CCNA SECURITY

(Pre requisite is CCNA R&S)

CISCO CERTIFIED NETWORK ASSOCIATE - SECURITY

Duration: 2 Weeks | 4 Hrs Per Day (starts on 15th of every month)

Batches: Morning: 7.30 or Evening: 6.00

Fees: ₹ 7,500/-
+ 14% Service Tax

CCNP SECURITY

(Pre requisite is CCNA Security at ZOOM)

CISCO CERTIFIED NETWORK PROFESSIONAL - SECURITY

Duration: 2 Weeks | 4 Hrs Per Day (starts on 30th of every month)

Batches: Morning: 7.30 or Evening: 6.00

Fees: ₹ 9,500/-
+ 14% Service Tax

CCIE SECURITY

(Pre requisite is CCNA & CCNP Security at ZOOM)

CISCO CERTIFIED INTERNETWORK - SECURITY

Duration: 1 Month | 4 Hrs Per Day

Batches: (Contact the Counselors for the next available batch)

Fees: ₹ 15,500/-
+ 14% Service Tax

VMware vSphere

(Pre requisite is MCSE)

Duration: 1 Month | 4 Hrs Per Day (starts on 15th of every month)

Batches: Morning: 7.30 and Evening: 7.30

Fees: ₹ 4,950/-
+ 14% Service Tax

VMware vCloud

(Pre requisite is VMware vSphere)

Duration: 1 Week | 4 Hrs Per Day (starts on 15th of every month)

Batches: Morning: 9.30 to 11.30

Fees: ₹ 2,500/-
+ 14% Service Tax

CHECKPOINT FIREWALL

Duration: 2 Weeks | 4 Hrs Per Day

Batches: (Contact the Counselors for the next available batch)

Fees: ₹ 5,500/-
+ 14% Service Tax

We also offer the following courses (Contact the Counselors for the next available batch)

- ▶ **CCNA Voice** @ ₹7,500/-
- ▶ **CCNP Voice** @ ₹9,500/-
- ▶ **CCIE Collaboration** @ ₹15,500/-
- ▶ **CCNA Data Center** @ ₹7,500/-
- ▶ **CCNP Data Center** @ ₹9,500/-
- ▶ **CCIE Data Center** @ ₹15,500/-
- ▶ **IPv6 Migration** @ ₹5,500/-

FACULTY

- ▶ All Senior Engineers of Zoom working on Live projects
- ▶ Training Engineers of British Army, CISCO, CMC, GE, BSNL, Tata Teleservices and Several Corporates etc for 18 Years.

FREE Training

Zoom Technologies offers a number of free resources for the professional development of network engineers.

Register on our website to get access to the video recordings of live sessions on:

- **MCSE – Windows Server 2012**
 - **Cisco – CCNA**
 - **Cisco – CCNP**
 - **Cisco – CCIE**
 - **Exchange Server 2013**
 - **Linux**
 - **Advanced Linux**
 - **Ethical Hacking and Countermeasure Expert (www.us-council.com)**
- } All Tracks (R & S, Security and Voice)
- } All Flavors

Find us at: www.zoomgroup.com

Like us on Facebook and get access to free online webinars as well as special offers and discounts.
<https://www.facebook.com/ZoomTechnologies>

Online Training

Online Training at Zoom is a cost effective method of learning new networking skills from the convenience of your home or workplace.

Taking an online training course has many advantages for everyone (Freshers / Working Professionals). Zoom offers online training for the highly coveted CCNA, CCNP and CCIE courses as well as MCSE, Linux, VMware, Ethical Hacking and Firewalls, IPv6 with more courses planned for the near future. These are live instructor led courses, using Cisco WebEX. Check out our online course offerings at: http://zoomgroup.com/online_course

Job Opportunities

There is a high demand for network and security professionals at all times. Apart from job opportunities in India and the Middle East, network and security administrators are also sought-after in the US and Europe.

If you do not have the right skills, then get them now! Choose the experts in network and security training, an organization which has already trained over one hundred thousand engineers.

For the latest job openings in networking and security, register and upload your resume on: <http://zoomgroup.com/careers> or visit zoom to choose job offering from several multinational companies.





ABOUT US

Zoom Technologies India Pvt. Ltd. is a pioneering leader in network and security training, having trained over a hundred thousand engineers over the last two decades.

We offer a world class learning environment, with state-of-the-art labs which are fully equipped with high-end routers, firewalls, servers and switches. All our courses are hands-on so you'll get much needed practical experience.

The difference between us and the competition can be summed up in one simple sentence. Our instructors are real-time network professionals who also teach.

Zoom has designed, developed and provided network and security solutions as well as training to all the big names in the Indian industry, for the public sector as well as corporate leaders. Some of our clients are:

TATA
BSNL
VSNL
Indian Railways
National Police Academy
Air Force Academy
IPCL- Reliance Corporation
CMC
British Army

No other training institute can boast of a customer base like this. This is the reason for the resounding success of our networking courses. If you do not have the right skills, then get them now. Come, join the experts!

Training Centers in Hyderabad, India.

Banjara Hills

HDFC Bank Building, 2nd Floor,
Road # 12, Banjara Hills,
Hyderabad - 500 034
Telangana,
India.

Phone: +91 40 23394150
Email: banjara@zoomgroup.com

Ameerpet

203, 2nd Floor,
HUDA Maitrivanam, Ameerpet,
Hyderabad - 500 016
Telangana,
India.

Phone: +91 40 39185252
Email: ameerpet@zoomgroup.com

Secunderabad

Navketan Building,
5 Floor, # 501
Secunderabad - 500 003
Telangana,
India.

Phone: +91 40 27802461
Email: mktg@zoomgroup.com

Dilsukhnagar

1st Floor, # 16-11-477/B/1&B/2,
Shlivahana Nagar, Dilsukhnagar,
Hyderabad - 500 060
Telangana,
India.

Phone: +91-40-24140011
Email: dsnr@zoomgroup.com

website: www.zoomgroup.com

